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ABSTRACT

This self-instructional module shows how to break down a goal into its directly observable component parts. Once this is done, the parts can be used as evaluative criteria for measuring goal accomplishment. The procedure used in this study is a specific application of a general method developed at the University of Massachusetts, called "The Operationalization of Fuzzy Concepts." The concept operationalized is career education, and involves the following steps: (a) construction of a positive hypothetical situation describing a person involved in a career education situation, and a list of interactions concerning the nature of the situation; (b) construction of a negative hypothetical situation with people not involved in career education, and an appropriate descriptive list; (c) repetition of (a) and (b) by two or three other people, and subsequent comparison of descriptive lists in order to find additional dimensions of career education; (d) reexamination of (a) and (b) in order to study the implications of what was omitted from the descriptive lists (i.e., not originally considered part of career education); (e) contemplation of dimensions heretofore considered unrelated to career education; and (f) breaking down of original "fuzzy" concepts into directly observable behaviors or states. (JS)

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A MODIFICATION OF: SELF-INSTRUCTIONAL MODULE FOR LEARNING THE HUTCHINSON METHOD OF OPERATIONALIZING A GOAL OR INTENT

by

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SELF-CONTAINED
WORKBOOK
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Note: Modified by Arthur L. Leland to specifically operationalize the concept of "Career Education".

HOW TO USE THE MODULE

The purpose of this self-instructional module is to help you learn how to break down a goal into its directly observable component parts. These parts of the goal can then be used as evaluative criteria for measuring accomplishment of the goal.

You, the reader, will not want to proceed further unless you believe your purposes coincide with the purpose of the module. As a guideline on whether to continue, you might ask yourself right now, "Do I, or does any decision-maker I work with, have a goal or an intention that I want to see accomplished by the program I am working on?"

If your answer is "Yes", then ask yourself the question, "If I were to tell that goal to someone eles and ask him to find out whether that goal was being accomplished, would he come back to me with the same information that I would bring back if I were checking on the goal?" If your answer to that question is "Yes", and if you can have the same thing happen for other goals too, then you probably do not need to study this module. But if the answer to that second question is "No", then the module is intended for you.

The procedure which you will experience during this self-instructional module is a new method for operationally defining goals. This is a specific application of a general method developed by Thomas E. Hutchinson, Associate Professor of Education, University of Massachusetts, which he calls "The Operationalization of Fuzzy Concepts", for reasons that will be obvious when you do the procedure.

Now continue to read through these instructions. Be sure to proceed through it page by page, without pre-viewing, skimming or skipping. Experience has shown that exposure to the material without doing the procedure step by step can lose to the reader many of the benefits of this procedure.

The "Fuzzy Concept" which we will attempt to operationalize is CAREER EDUCATION. We are all involved in some aspect of Career Education, apparently, but just how would you go about defining the term - Career Education? This exercise should assist each one of us to define our own concept of Career Education and thus provide us with a firmer foundation for communications with others.

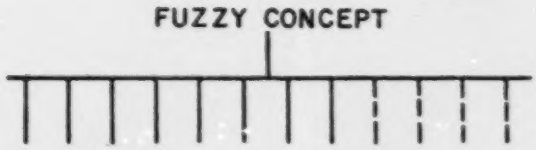
The first step is to construct in your mind a hypothetical situation. This situation should be as real and as complete as possible - with people in it, furniture, a complete environment. It might be inside or outside; that doesn's matter. It Should not be too specific - a general hypothetical situation. Now, in this hypothetical situation a person is involved with Career Education. In fact, this person is the epitome of being involved in Career Education. This person is the best that you can imagine in being involved with Career Education. Please examine this hypothetical situation, observe it carefully, and write down all the things that you see about that person, about that person's interaction with other people, about the environment, about interaction between people and the environment, anything at all going on that would indicate to you that Career Education is occuring. And just write them down on a list. Do this now on the next page.

WRITE DOWN THE THINGS YOU SEE THAT INDICATE TO YOU THAT THE FUZZY CONCEPT IS PRESENT. Be sure to exhaust the hypothetical situation. Don't just put down the first two or three things that come to mind. Get everything out of it that you can.

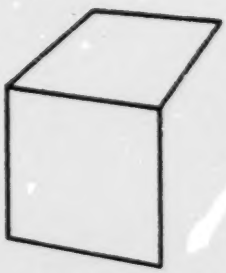
WHEN YOU HAVE EXHAUSTED THIS PROCESS, PROCEED TO THE NEXT PAGE.

If you were trying to operationalize Career Education completely, you would not move on to a second step until the first one had been completely exhausted, with everything out of it you could possibly get.

By the first step, you may have identified some of the dimensions you have for Career Education at this first level of breakdown. As the early steps in



the procedure are completed, you will have found more and more of the dimensions; in later steps you may have more difficulty in finding others. You should not necessarily expect each of the later steps to elicit the same quantity of dimensions that you get at the first stage.

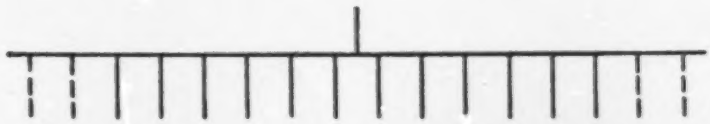


The second step of the procedure is to construct a second hypothetical situation. Again, it should be as complete as possible. There should be people; they should be doing things, interacting with each other; there should be a complete environment. It may be inside or outside. It should have anything you want to put into this environment -- except, in this hypothetical situation, there is no Career Education going on at all. A complete absence of Career Education." What I want you to do is to examine this situation, observe it carefully and write down all the things you can see in this situation that indicate to you that Career Education is absent. Don't just write down the negative ends of positve dimensions that you thought up in the first situation. Use the second hypothetical situation to identify a wider range of dimensions of Career Education" than you got from the first step. Use the next page to write your list.

WRITE DOWN THE THINGS YOU SEE THAT INDICATE TO YOU THAT THE FUZZY CONCEPT IS ABSENT. Again, try to exhaust the situation; get everything out of it that is available in it.

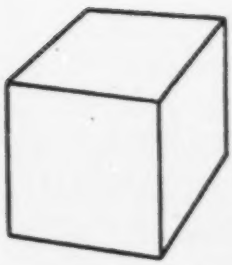
WHEN YOU HAVE EXHAUSTED THIS PROCESS, PROCEED TO THE NEXT PAGE.

By doing the second step you may have identified some more of the dimensions



that you have for Career Education With each succeeding step, there will be fewer left, and they will be harder and harder to find.

Some parts of the procedure will work better for you than others will. Also, for different fuzzy concepts, different aspects of the procedure will work better than others. For example, there are some fuzzy concepts where the negative hypothetical situation gets all the dimensions and the positive gets few; and there are others where the positive situation gets most of the dimensions and the negative gets few. So for that reason I advise against skipping any of the steps. Only when you have had enough experience with it for a large number of instances, is it safe to say that this particular part doesn't work for you. If some part doesn't work for you, then don't do it; but at first give it a good workout because, for example, if the first three times you use it, part two doesn't work, that doesn't mean that it won't work when the next fuzzy concept that comes along that you want to deal with. It may very well be the most important step for that one, so give it a good chance before you rule out any one of the steps for your own practice. But if you do get a consistent history of a certain step not doing anything for you, then obviously you should eliminate it.



The third step in the procedure is to get two or three other people to go through steps one and two, the positive and negative hypothetical situations, whereby they operationalize in part what they mean by Career Education -- their dimensions for it. Then you take their lists and look at each item -- one by one -- and you ask yourself the following question, "Is this an item I want on my list; Is this a dimension that I have, really?" This is just another way of finding additional dimensions.

Of course there are a number of possibilities for each item on another person's list. You may already have it on your list. You may find one that you would really like to have, so you add it to your list. You may find one that is not on your list and you don't want it. In fact, you can't stand it. In fact, it makes you so angry that you think of two or three more of your own dimensions, and of course you add them to your list. The point is that you identify all the dimensions that you have for the fuzzy concept. You are not agreeing or disagreeing with the other people. You are using their lists as stimuli to yourself, so that you can consider each of their dimensions and say, "This is one of mine, but I didn't think of it before." Or you say, "This one is ridiculous -- it makes me think of three that I hadn't though of before," and so you add them. And of course the last possibility is that it's not on your list and you don't want it and it doesn't make you think of a blessed thing. Now review this last paragraph and do the procedure. (If there are no other people from whom you can get lists at this moment, then stop here temporarily until you are able to get them.) Use the next page in the workbook to record the additions to your list.

Do not discuss or justify your items. This procedure is designed to help you make your list as complete as possible, not to justify your list to anyone else.

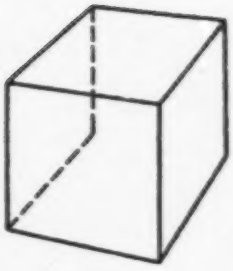
ADDITIONS TO YOUR LIST BASED ON COMPARISON WITH OTHERS:

WHEN YOU HAVE FINISHED COMPARING LISTS, PROCEED TO THE NEXT PAGE.

By that last process, you may have found a few more. It can be quite rich.

One thing that might be mentioned is that it is desirable to pick people who do not think the way that you do -- why would you want to look only at your own dimensions? That would not help in terms of identification. So pick people who you think will give you some spread, because then you can better examine what your own spread is.

The purpose of the whole operationalization procedure is definitely not to eliminate fuzzy concepts. For one thing, if we had to communicate always at the dimension level, in order to say "hello" it would take a few volumes, and obviously we cannot manage to do that in everyday life. A fuzzy concept is a remarkable, convenient shorthand, although a lot of information gets lost in the process of creating and using one. It is advisable to be aware of this so that you lose less. It is not one of the purposes of the procedure to cause people always to use words precisely the same way, with the same set of dimensions. The process probably can be used, though, to help people get together.



The fourth step in the procedure is harder. In this step, what I want you to do is to go back to the original hypothetical situations you had before, conjure them up again, as it were, and I want you to look at them again because there were things going on in those hypothetical situations that you did not write down because at the moment you did not think that they were part of what you mean by Career Education. I want you to re-examine all the things that you can find in those original hypothetical situations that you did not put down, and seriously examine the implications of those things <u>not</u> being part of what you mean by Career Education.

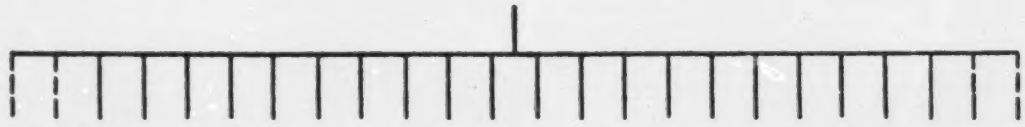
Here is an example, but it is out of the context of this particular fuzzy concept. Say, I am trying to operationalize someone's concept "success in a job," and he sees himself getting good money, but he does not write that down. It is not one of his listed dimensions of "success in a job." So I'll say to him, "Imagine that you had no money at all, ever;" and usually at that point he is prepared to say "Well, by not putting it down I didn't quite mean <u>that</u>. I need enough to exist and to live -- up to a certain point. After that, it is not important as a dimension of success in a job." So he puts it down and qualifies it: "Money up to $10,000/year" or whatever level is being thought about.

So in this step in the procedure you re-examine the hypothetical situations; you look at the things that are going on, and especially at the things you did not write down. You seriously examine the implications of those things not being part of what you mean by Career Education. Do this now, and use the next page to add to your list.

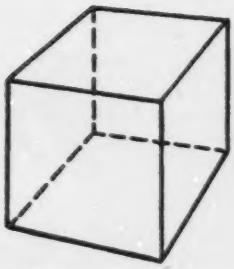
REEXAMINATION OF ORIGINAL HYPOTHETICAL SITUATIONS:

WHEN YOU HAVE FINISHED THE REEXAMINATION, CONTINUE TO THE NEXT PAGE.

You might have found a few more dimensions by doing the fourth step, but of course there were fewer to find.



You have already identified a lot of dimensions that you have at this first level of breakdown.



Because the fifth and last step is the hardest, what I want you to do is, after I say the directions, just do it. Don't cognate over what it means to do it, just let it happen.

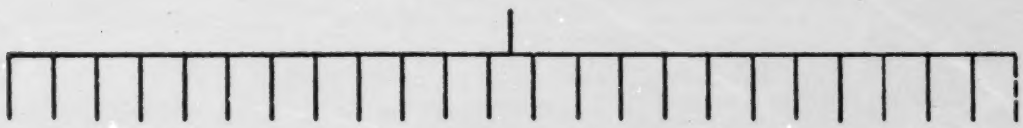
Here are the directions: I want you to think up dimensions that have nothing to do with Career Education and then seriously examine whether or not they do.

RESULTS OF THE STEP:

WHEN YOU HAVE EXHAUSTED THIS PROCESS, CONTINUE TO THE NEXT PAGE.

Here is one way the step can work. Let us say, for example, I am a marriage counselor and a fellow comes who is having domestic problems at home. I have him operationalize what he means by "good father," and he goes through a positive hypothetical situation and a negative hypothetical situation and then sees some other people's lists. (Because I've been doing this for 20 years, I have a lot of them handy.) Then he goes back to the hypothetical situations and looks again at what is going on and examines whether or not the things that are going on really have anything to do with "good father." So for about an hour or more he has been immersed in this fuzzy concept. Then I ask "All right, what has nothing to do with it?" and he replies, "How much time I spend at home." People <u>don't</u> think up things that have nothing to do with their concept when you ask them to. Of course, if you cognated over it long enough, you would think of the pyramids of Egypt or the dark side of the moon. But if you just let it happen, what would you get? You would get things that really <u>are</u> related, as a result of the mind-freeing twist of the question, "What has nothing to do with it?" It may be something, in the case of counseling, that is a repressed dimension. It may be, in other cases, things that might be considered frivolous. The frivolous things come up, and you can examine them seriously. You see, one of the things that we mean in Western thought by "ridiculous" is "don't think about it," and my suggestion is that's dangerous. We have to think about such things. The greater our tendency is to label something ridiculous, probably the more important it is to consider it very seriously, because it is within that area that we are not utilizing our thought, not giving it careful consideration.

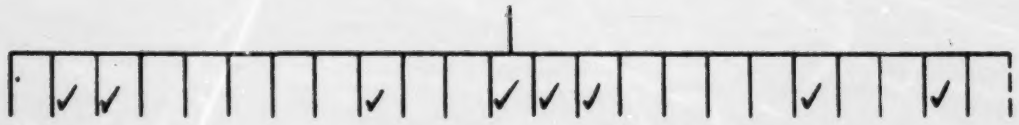
By this last step, you may have identified some more dimensions and all I will ever claim is that at the very best, doing the whole procedure carefully



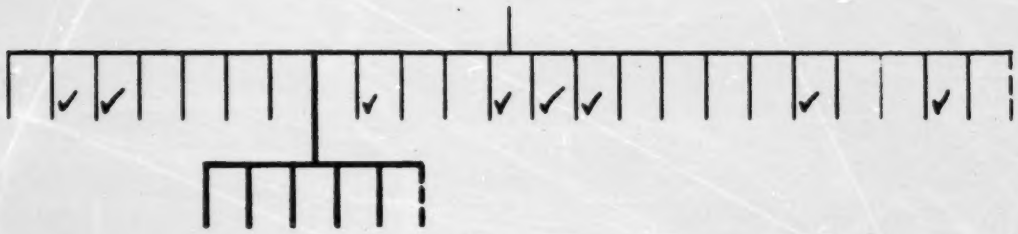
and exhausting each step, you will get a very good approximation to the number of dimensions that <u>you</u> have, what <u>you</u> mean when you use the term Career Education.

Now the next thing to do is to go back to the first item on the first line and look at it — the very first item on the first list. And ask yourself the following question, "Is this either a directly observable behavior or a directly observable state?" Another way to approach it is to ask, "If I said this

dimension to someone else and told him 'Go over in that room and tell me if this



thing is happening,' would he come back with the same information that I would get if I went myself?" If the answers to these questions are "No," then that item is a fuzzy concept. What you would then do is take that fuzzy concept and



go through the same sequence of five steps to break it down. Usually at the very first level of breakdown for a very fuzzy concept, there will be very few dimensions that are directly observable behaviors or states. However, as you go down the structure, you will gradually get a higher and higher percentage of directly observable behaviors or states until, if you operationalize all of it, you will have a very long, very comprehensive, very complete approximation to the total number of specific behavioral events and states that you mean when you use this term.

Now someone is going to say, "That takes an awful lot of time," or "It's awfully complex." Well, it is YOUR fuzzy concept. If the process is complex, that is because your concept is complex. If your concept is simple, so will this be.

Another possibility is that one may find the original fuzzy concept cropping up again a couple of layers down; nothing ever gets down to observability. Well, that may be because the person has no reality base for the concept that he is using. For instance, if I gave you a fuzzy concept that you had never used, don't use, and that isn't meaningful to you, you would probably be able to go through the process for a while but you would never come down to earth because it is a whurr of verbiage, a whurr of fuzz. It never would touch down to

reality because you would have no reality referents that are meaningful to you in terms of that fuzzy concept.

Now, go back to the first item on the first list and ask yourself, "Is this a directly observable behavior or state? If I sent someone to find out if this thing were happening, would he come back with the same information that I would get if I went myself?" If the answer is "No" to either question, then you have a fuzzy concept which needs to be broken down further. And so on for the other items on your list. For each item that is still fuzzy, repeat the five-step procedure to get to the second level of breakdown. Do one now, and you can use the next page to begin the procedure.

BEGIN THE PROCEDURE FOR THE SECOND LEVEL OF BREAKDOWN:

If after completing the procedure at the second level of breakdown, you find you still have some dimensions that are not directly observable behaviors or states, then repeat the procedure again with them. At this third level, you may not need to check with other persons (Step 3).

You have completed this instructional module. Please follow this advice:

> If you wish to have someone else use this procedure, please do not just describe it to them; have them actually go through the process. A negative reaction can occur when a person only hears the steps described without actually experiencing them.